only possible source of plumbism seemed to be the wall-paper of the large, airy room in which he slept. Analysis revealed large quantities of lead in the paper, and an unusual method of lead-poisoning.

SUPERIOR HOMONYMOUS HEMIANOPSIA.

In the Union Médicale, October 24, 1891, there is a case reported by Dr. Boè, in which there was loss of the upper half of both visual fields without diminished vision. There was also lessened sense of smell and decreased knee-jerk on one side. The patient had had syphilis five years before. One occipital lobe only might have been involved, and there might have existed some abnormal distribution of nerve fibres going to the retina. L. F. B.

THERAPEUTICAL.

TREATMENT OF EPILEPSY BY SODIUM BORATE.

In Le Progrès Médical, October 10, 1891. Professor Mairet, of Montpellier, after a thorough trial with this agent in many cases of epilepsy, comes to the following conclusions.

1. Borate of soda may be of great value in the treatment of epileptic attacks, checking, even suppressing them, for months.
2. Borate of soda succeeds better in idiopathic epilepsy than the bromide of potash.
3. The bromide of potash on the other hand is better adapted when with epilepsy there is associated some functional nervous disorder, and only after the potash salt has failed in these cases should one resort to the borate of soda. W. C. K.

ETHYLENE BROMIDE IN EPILEPSY.

Dr. Donath (British Medical Journal, July 11, 1891), believing the saline actions of ordinary bromides to be injurious in many cases of severe epilepsy, has made use of this liquid in ten patients, who were under observation long enough to give reliable results. The attacks became fewer, milder and of shorter duration; assuming the form of *petit mal*, or simply muscular twitchings, without loss of consciousness. He believes ethylene bromide is a good substitute for potassium bromide, and that the bromide and not the potassium is the active element. A. F.

PHYSIOLOGICAL.

THE EXPERIMENTAL EFFECT OF COLD UPON THE PERIPHERAL NERVES.

In the Riforma Med., 1889, G. Alonzo, who has studied the effects of a freezing mixture applied over the peripheral nerves, reports the results of his experiments. A portion of a rabbit's leg about one ctm. in diameter, corresponding with the exit of the posterior tibial nerve, was refrigerated by the ether spray for five minutes daily. After 18 to 20 applications the temperature fell to —10° C., within two minutes. After each application there was a temporary paresis of the extremity, its duration being proportioned to the number of preceding applications, until at last the paralysis was complete.

Subsequently a freezing mixture composed of snow and salt was used instead of the ether, and sometimes guinea pigs took the place of the rabbits. The nerves were examined after a single refrigeration, and also after a number ranging from two to thirty. The microscopical investigation was made by Ranvier's method after the preparation had been treated with hyperosmic acid and picrocarmine in glycerine. In general it was shown that a decided refrigeration of the skin produces gradually a series of marked changes in the subjacent nerve fibres. The most striking of these were the splitting up of the nerve and the invasion of leucocytes into the fibres, distortion of the axis cylinders and their separation into fragments and globules; altogether reminding one of the embryonic condition of the nerve fibres. The sheath of Schwann was not involved.

The above mentioned changes were most pronounced in the portion directly exposed to the cold, and in the peripheral nerve distribution. Their intensity was proportional to the duration of the cold and the number of the applications. The deeper the nerve lay under the skin the less marked were the changes. Upon the removal of the cause the degenerated nerves may undergo regeneration. (Centralb. f. klin. Med., No. 41, 1890). W. M. L.